

THREATENED FISHES OF THE WORLD: *Squalius svallize* (HECKEL & KNER, 1858) (CYPRINIDAE)

M. Piria¹, T. Treer¹, P. Ivanković², T. Tomljanović¹, I. Aničić¹, R. Safner¹,
D. Matulić¹, N. Šprem¹

Summary

Neretva chub *Squalius svallize* is an endemic vulnerable species, strictly protected in Croatia but not protected in Bosnia and Herzegovina. Populations are declining due to environmental degradation, dams, predators and poaching. A detailed study of current population status, biology and ecology of *S. svallize* is required.

Key words: Neretva chub, *Squalius svallize*, Conservation

COMMON NAMES

Strugač, Svalić (Cro), Neretva chub (Eng) (Fig 1).

CONSERVATION STATUS

IUCN Red List: vulnerable (Crivelli 2006); Croatia: vulnerable (Mrakovčić et al. 2006).

IDENTIFICATION

DIII8-91/2, AIII9-101/2, VII8, PI16-17, lateral line scales 44-51, eye diameter 19-23% HL; a row of black pigments along free margin of each flank scale, forming a regular reticulate pattern and no conspicuous broad dark spot on anterior half of exposed field of each flank scale; head shallow, conical; snout stout, markedly rounded; lower jaw short,

1 Prof. dr. sc. Marina Piria, e-mail: mpiria@agr.hr (corresponding author); prof. dr. sc. Tomislav Treer; assist. prof. Tea Tomljanović; prof. dr. sc. Ivica Aničić; prof. dr. sc. Roman Safner; Daniel Matulić, mag. ing.; assist. prof. Nikica Šprem, Department of Fisheries, Beekeeping, Game management and Special Zoology, Faculty of Agriculture, University of Zagreb, Svetošimunska 25, 10 000 Zagreb, Croatia

2 MSc Predrag Ivanković, Faculty of Agriculture, University of Mostar, Biskupa Čule 10, 88 000 Mostar, Bosnia and Herzegovina

length less than depth of operculum; mouth subterminal; (Vuković and Ivanović 1971; Kottelat and Freyhof 2007) size up to 353 mm TL (Ivanković et al. 2010).



Fig 1: Squalius svallize (photo P. Ivanković)

Slika 1: Squalius svallize (photo P. Ivanković)

DISTRIBUTION

Endemic species of the Adriatic basin in the southeastern Europe. According to Mrakovčić et al. (2006) it inhabits parts of Croatia, Bosnia and Herzegovina and Albania. Kottelat and Freyhof (2007) indicate that *S. svallize* is restricted only to Neretva, Trebišnjica and Ljuta drainages in Croatia and Bosnia and Herzegovina.

ABUNDANCE

Sporadic; locally abundant.

HABITAT AND ECOLOGY

Streams with swift water, lakes in karstic areas. Enters subterranean waters (Kottelat and Freyhof 2007). Feeds on small water invertebrates and its larvae (mostly Trichoptera, Gastropoda and Diptera) (Mrakovčić et al. 2006; Ivanković et al. 2010).
Reproduction: Spawns in April-June (Kottelat and Freyhof 2007).

THREATS

Primarily anthropogenic down falling quality of its limited habitats (Mrakovčić et al. 2006), dams, predators, poaching.

CONSERVATION ACTION

Strictly protected in Croatia. Not protected in Bosnia and Herzegovina.

CONSERVATION RECOMMENDATIONS

Population monitoring and biological research to establish range and habitat status. Habitat protection, fishing regulations and water pollution control.

Sažetak

UGROŽENE RIBE SVIJETA: *Squalius svallize* (HECKEL & KNER, 1858) (CYPRINIDAE)

M. Piria¹, T. Treer¹, P. Ivanković², T. Tomljanović¹, I. Aničić¹, R. Safner¹,
D. Matulić¹, N. Šprem¹

Sval *Squalius svallize* je endemska osjetljiva riblja vrsta zaštićena u Hrvatskoj, ali nezaštićena u BiH. Njihove populacije opadaju zbog degradacije staništa, brana, predatora i nezakonitog ribolova. Stoga se predlaže procijeniti status populacija, biologiju i ekologiju ove vrste.

Ključne riječi: Sval, *Squalius svallize*, zaštita

1 Prof. dr. sc. Marina Piria, e-mail: mpiria@agr.hr (corresponding autor); prof. dr. sc. Tomislav Treer; doc. dr. sc. Tea Tomljanović; prof. dr. sc. Ivica Aničić; prof. dr. sc. Roman Safner; Daniel Matulić, mag. Ing.; doc. dr. sc. Nikica Šprem, Sveučilište u Zagrebu, Agronomski fakultet, zavod za ribarstvo, pčelarstvo, lovstvo i spec. zoologiju, Svetošimunska 25, 10 000 Zagreb, Croatia;

2 Mr. Sc. Predrag Ivanković, Sveučilište u Mostaru, Agronomski fakultet, Biskupa Čule 10, 88 000 Mostar, Bosna i Hercegovina

REFERENCES

- Crivelli, A.J. (2006); *Squalius svallize*. In: IUCN 2009. IUCN Red List of Threatened Species. Version 2009.2. (www.iucnredlist.org).
- Mrakovčić, M., Brigić, A., Buj, I., Čaleta, M., Mustafić, P., Zanella, P. (2006): Red Book of Freshwater Fish of Croatia. Ministry of Culture, State Institute for Nature Protection, Republic of Croatia, Zagreb, pp. 142. (in Croatian with English Introduction).
- Vuković, T., Ivanović, B. (1971): Slatkovodne ribe Jugoslavije. (Freshwater Fishes of Jugoslavija). Zemaljski muzej BiH, Sarajevo, pp. 130. (in Serbian).
- Ivanković, P., Treer, T., Piria, M., Knezović, Z. (2010): Diet and growth of the endemic Neretva chub, *Squalius svallize* from the Neretva river area, Bosnia and Herzegovina. Folia Zoologica, 59, 1, 51-56.
- Kottelat, M., Freyhof, J. (2007): Handbook of European Freshwater Fishes. Kottelat, Cornol, Switzerland and Freyhof, Berlin, Germany, pp. 423.

Received: 20. 01. 2012.

Accepted: 7. 9. 2012.